IV.—*Note on a new Provisional Genus of Carboniferous Polyzoa.* By R. Etheridge, Jun., F.G.S.

[Plate IV. B. figs. 1–4.]

Hyphasmopora, gen. nov.*

Polyzoarium dendroid (?), calcareous, composed of small cylindrical stems, often bifurcating. Cell-depressions arranged in linear longitudinal series, more or less separated from one another by a cancellated network or reticulation, forming the interstitial surface, and predominating at one part of the polyzoarium more than at others, presenting a longitudinal zone, devoid, or nearly so, of cell-depressions. The interstitial network consists of a series of irregularly formed pores.

The fragments to which I have provisionally applied the above name consist of small occasionally bifurcating stems, with nearly the whole of the surface occupied by six or more longitudinal rows or series of pyriform and (for the size of the organism) large cell-depressions, subalternating one with the other. The intermediate and remaining portions of the interstitial surface, between each longitudinal series and each individual cell, are occupied by small, irregularly formed, but generally elongate pores, forming a reticulated or cancellated network. This is more particularly the case over one part of the surface, generally devoid of cell-depressions, but occasionally with a single row running up the centre, or one or two irregularly placed. This space is bounded by the two lateral rows or series of cell-depressions, one occupying each side of the stem. At times the poral reticulation between the longitudinal series of cell-depressions is almost absent, or considerably reduced, when, the lateral prominent margins of two contiguous series uniting, a dividing ridge or keel is formed, which, when viewed transversely, gives to the cross section of the stem a slightly multiangular appearance. The cell-depressions lead upwards and inwards to the true cell-aperture or orifice, considerably smaller than the larger opening, and apparently oval in outline.

The cells are at first vertical, and then curve obliquely upwards and outwards to the surface, where they open at right angles to the imaginary axis, the pyriform depression in which

* ὕφασμα, tissue or web; πόρος, a passage or pore. [The specimens are in the collection of the Geological Survey of Scotland; and this description is published by permission of the Director-General of the Geological Survey.]

the orifice is placed having a prominent margin, projecting a little from the surface of the stem at its dorsal side, whilst the true orifice itself projects at its lower margin. At the point at which the cells bend from the perpendicular to the oblique angle at which they pass to the surface, one of the walls is much constricted, that nearest the external surface.

I have never seen this pretty coralline in any other condition than such fragments as are here figured; but a specimen has lately come under my notice in which there appears to be the remains of a lateral branch or dissepiment, after the manner of *Polypora* or *Fenestella*; but on this point I am in doubt. Under these circumstances it would be premature to state whether the habit was simply dendroid, with free stems and branches, or reticulate.

I submitted specimens of the simple bifurcating stems to Mr. Busk, who very kindly informed me that in such a condition they resembled the genus *Vincularia*, Defrance, but that none of its hitherto described species were so pitted or reticulated, and that, as the openings of the cells do not appear to be placed on all sides of the stems, as they are invariably in *Vincularia*, it is probably the type of a new genus, perhaps allied to the latter.

As I am unable to meet with any generic diagnosis which would include the form, I have adopted, provisionally at least, the foregoing name for its reception, and for a specific designation would associate with it the name of Mr. Busk, to whose kindness I am indebted for much information on fossil Polyzoa. In addition to this species, there are one or two others in my possession which will perhaps come under this genus.

Hyphasmopora Buskii, sp. nov.

Cell-depressions pyriform, subalternating with one another, narrowing towards their ventral margins, expanding above, where they project a little from the surface of the polyzoarium, arranged in about six linear series, the individual depressions of each row separated from one another vertically by the interstitial reticulation; laterally the margins of contiguous rows sometimes unite, forming dividing ridges or keels; cell-orifice round, placed within the cell-depression at its upper extremity. The interstitial network encloses a series of irregular poral openings. The sides are occupied by the two lateral rows of cell-depressions. The reverse, over which the reticulation attains its greatest development, sometimes has a single row of large cell-depressions placed along the median line, at various distances from one another.

Localities. Limekilns Old Quarry, near Limekilns House, near East Kilbride, from shale between the first and second limestones of the Calderwood series, Lower Carboniferous Limestone group; Calderside Old Quarry, near East Kilbride, from a similar geological horizon: collected by Mr. James Bennie. Mousewater, opposite Lambcatch, near Wilsontown, from shale between two thin limestones of the Lower Carboniferous Limestone group; quarry near Hillhead, near Wilsontown, from shale over the Guildhouse Limestone, Lower Carboniferous Limestone group: collected by Mr. A. Macconochie (collection of the Geological Survey of Scotland).

EXPLANATION OF PLATE IV. B.

[The figures are all considerably enlarged.]

Fig. 1. *Hyphasmopora Buskii*, a bifurcating stem, showing the longitudinal series of cell-depressions, with a peculiar swelling of the interstitial surface.

Fig. 2. The same. In this specimen are visible a few of the true cell-orifices.

Fig. 3. The same, showing the opposite face or interstitial zone, with its single row of cell-depressions.

Fig. 4. The same, a similar specimen to the last, but the branches with a wider angle of bifurcation.

V.—*On the Madagascar River-Hog* (Potamochœrus), *and on the Skulls of the three Species of the Genus.* By Dr. J. E. Gray, F.R.S. &c.

[Plate IV. A.]

Flacourt, in his 'History of Madagascar,' notices a wild boar in that island; and D'Aubenton, in his additions to Buffon's 'Hist. Nat.' xiv. p. 390, describes a dry head of a "sanglier de Madagascar" in the Cabinet of Paris, which he says is that of a "cochon de Siam;" but by his description it is evidently that of a river-hog (*Potamochœrus*). I noticed it as a species of that genus in 'Proc. Zool. Soc.' 1868, p. 38, more especially as Mr. Sclater informed me that there was a living specimen of the animal from Madagascar in the Garden of Plants at Paris; and in the 'Catalogue of Carnivorous, Pachydermatous, and Edentate Animals in the British Museum,' 1869, p. 344, I named it *Potamochœrus madagascariensis*, observing that I was not aware of any specimen in this country. I now find, which had escaped me